Science and Technology Long Poles

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S&T Long Poles

- Reference: ***S&T Long Poles In The Tent (2004)***

http://www.tecom.usmc.mil/techdiv/downloads/S_and_T-Long-Poles-2004.p

- This paper is intended to alert the Science and Technology (S&T) community to S&T needs as viewed from the standpoint of those who determine training solutions for the Marine Corps.

- We welcome questions and comments from the acquisition community, the training community, the S&T community, and our Fleet Marine Forces.

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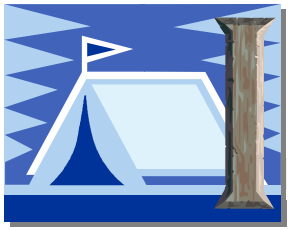

- Database Correlation
- Cohesive Mission Rehearsal
- Rapid Generation of Urban Landscape
- Constructive Sim Wrap-around for Urban Exercises
- C4I System-Of-Systems
- Training Range Networks
- Cognitive-Physical Integrated Trainer

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- Behavioral modeling
- Multi Resolution Modeling
- Multi Level Security
- Realistic OPFOR via Augmented Reality
- Blended Tracking
- Passive Collection of Lessons Learned
- Battery Life

S&T Study Areas

- ***Identify the true value of live fire training***
  - Marines know that live training is “good,” just like they know that oxygen is good. This goodness has to do with realism, effectiveness, pervasiveness, and flexibility. What makes for good live training? How good is good enough? How much do we need? How much does it cost to train an infantry battalion?

- ***Appropriate/Acceptable mix of live/virtual/constructive training***
  - This might be a partner study with the first one listed, above. How much virtual/constructive training can we take? Should we take? How much can we afford?

- ***Identify negative learning from virtual simulations***
  - We think we know how real is real enough. Can we quantify this reality? We need to identify the potential for negative learning. We also need to know how some positive experiences might have unintentional negative impact upon other skills.

- ***Immersive environments (visualization) and team building/training***
  - Immersive training has great merit. Some forms, however, are not well suited to improving the interpersonal/small team dynamics that are so vital so success on the battlefield. How do we capitalize on virtual environments while doing no harm to team building/training?